Bell Atlantic

Bell Atlantic Network Services, Inc.
1133 20th Street, N.W.
Suite 800
Washington, DC 20036
202 392-6980
FAX 202 392-1687

Patricia E. Koch
Assistant Vice President
Federal External Affairs and Regulatory Relations

May 13, 1996

EX PARTE

Mr. William Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: CC Docket 95-116 - Number Portability

Dear Mr. Caton:

On May 10th, the attached ex parte was delivered to Commissioner Reed Hundt's office. This notice is being filed one day late due to it being delivered to the Commissioner's office past normal business hours.

Please include this filing as part of the public record in the above-captioned proceeding. Please call me if you have any question concerning this filing.

Sincerely,

Attachment

cc: R. Metzger
R. Welch
S. McMaster
J. Karp

Dkt

Bell Atlantic Network Services, Inc.
One Bell Atlantic Plaza
1310 North Court House Road, 11th Floor
Arlington, Virginia 22201
703 974-1200
FAX 703 974-8621
E-Mail edward.d.young@bell-atl.com
eyoung@ba.com

Edward D. Young, III
Vice President - External Affairs
and Associate General Counsel

May 10, 1996

The Honorable Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Chairman Hundt:

At our meeting Friday, you asked me about the cost to deploy "final" number portability and when it could be accomplished. You also asked what we thought the Commission should do at this point to facilitate the industry's on-going work on this issue.

Bell Atlantic has been actively involved in the state number portability workshop in Maryland, the only one of Bell Atlantic's states to have undertaken an effort of that type. Bell Atlantic has learned a great deal from this involvement, including that there are a number of issues that have yet to be worked out about how best to achieve "final" number portability.

Bell Atlantic estimated that it would have to spend approximately $136 million to implement number portability in Maryland in the manner proposed in the workshop.[1] This estimate is for a Location Routing Number ("LRN") capability[2] that could be available for implementation by July 1997.

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[1] This expenditure is just for Bell Atlantic network and operation support systems upgrades. It does not include any modifications that might be required to other network-related systems (such as, LIDB and Bell Atlantic's fraud detection systems), on-going provisioning costs to support number portability, training, maintenance costs and certain switch processor upgrades. It also does not include costs incurred by other service providers (local and long distance) or the cost of the shared service management system database.

[2] With LRN, a telephone company switch holds a call while it sends a query to a special database. If the number being called has been "ported" to another service provider, the database returns a number that identifies the other provider's switch and the carrier delivers the call accordingly.

Bell Atlantic has not done specific studies in its other six jurisdictions. However, applying the Maryland results to them and updating those results to incorporate new information on switch processor upgrades, we believe that the total Bell Atlantic network and operations support system investment would be in the neighborhood of $440 million.

There are two significant drawbacks to the form of LRN that can be available July 1997. If these two problems were solved, Bell Atlantic estimates that its cost of number portability would be reduced by more than forty percent, to approximately $256 million.[3] Especially because "interim" number portability is available now, savings of this magnitude clearly outweigh a relatively short delay in "final" portability.

The first problem with LRN as now planned is that it requires a database lookup on *every* inter-switch call. Thus, there would be millions of unnecessary database queries every day — thousands of pointless database transactions for every query that results in a ported number.[4] This would increase the number of databases necessary to provide number portability and the transmission capacity between switches and databases. It would also require local telephone companies to increase the capacity of the processors in the vast majority of their switches. The industry has identified a way to eliminate these unnecessary queries (known as Query on Release, or "QoR"). Two equipment manufacturers have advised us that this capability can be ready for deployment by July 1997, but we have not received availability information from our third switch supplier.

The other drawback is that LRN as now planned is being developed in three different ways by our three suppliers. It would be more expensive for Bell Atlantic to accommodate this non-standardized design in its network than if each manufacturer had the time to build to standardized specifications. Bell Atlantic believes that, under Commission direction, an industry task force could develop detailed specifications within three months. If this work is completed by September 1996, switch manufacturers should be able to begin to delivery the necessary upgrades by early 1998. This industry task force could also develop a detailed plan for the nationwide implementation of "final" number portability.

If these two problems were solved — if LRN were standardized and included the QoR feature — Bell Atlantic estimates that its projected cost of number

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[3] This is based upon an assumption that 25 percent of all calls will go to ported numbers. This figure clearly is high for the early stages of competition in the local markets, and actual savings could easily be even greater.

[4] Pacific Bell calculates the price tag for this inefficiency to be $1 billion in California alone. Supplemental Comments of Pacific Bell in Dkt. No. 95-116, at 7, dated March 25, 1996.

portability would be reduced by more than forty percent, to approximately $256 million.[5] A savings of this magnitude more than makes up for the delay in implementing final number portability.

Moreover, two switch manufacturers have advised Bell Atlantic that the way in which they would have to implement LRN in order to meet a mid 1997 deadline would be incompatible with possible network enhancements. For example, it would not support number portability where a competitive local exchange company has a different local calling area than the incumbent company. If the Commission or the States were to require Bell Atlantic to offer these enhancements, Bell Atlantic would have to scrap a portion of its recent investment in LRN from these manufacturers.

The lack of specification and standardization of LRN is an important point. LRN has never been used in a real telecommunications network. It is not even a service, with defined technical and operational specifications. LRN is really just a call handling protocol — a concept, albeit a promising concept. Bell Atlantic believes that it would be premature for the Commission to order the deployment of a concept, before the service has actually been fully specified and all its implications understood. In fact, several carriers have identified possible technical and operational problems with the LRN approach that require further work to solve.[6]

The industry's understanding of LRN is like its understanding of billed party preference in 1992 — the concept sounds attractive for consumers and carriers, but the details are unknown. As with billed party preference in 1992, the industry has not gone through the rigorous process of fully defining all the specifications of the service; thinking through what would really be required to implement it on a nationwide basis; and analyzing its effects on other services. When the Commission forced the industry to apply this discipline to billed party preference, the industry found that the service could affect other existing services and would cost several times more than had been generally believed. The Commission should require the same discipline of the industry before it adopts LRN as the national number portability standard, or before individual States are allowed to do so.

Whatever system is adopted, it is clear that permanent number portability will be an expensive undertaking. The Commission, however, has not yet addressed the issue of how these costs are to be recovered. We believe that the Commission cannot

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[5] This is based upon an assumption that 25 percent of all calls will go to ported numbers. This figure clearly is high for the early stages of competition in the local markets, and actual savings could easily be even greater.

[6] One carrier, for example, reports that LRN might not ensure the proper operation of features like automatic recall and automatic callback. Supplemental Comments of NYNEX in Dkt. No. 95-116, at 5, dated March 25, 1996. See also Supplemental Comment of Pacific Bell in Dkt. No. 95-116, at 3-4, dated March 25, 1996; Supplemental Comments of GTE in Dkt. No. 95-116, at 5, dated March 25, 1996.

reasonably order the implementation of any system without at the same time resolving the cost recovery issues. In this regard, a useful model for the Commission is the way it handled 800 database access, deciding the major cost recovery issues in the same order in which it required the deployment of the service.[7]

Unlike the other obligations in section 251, Congress specifically ties the local exchange carrier's duty to provide number portability to "requirements prescribed by the Commission." This is because Congress recognized that number portability is a national issue and must be developed and implemented consistently nationwide. Bell Atlantic urges the Commission to assert the leadership role that Congress saw for it and to call the industry to work under the Commission's auspices to build upon the State experiences and develop a sound national plan for this capability.

Sincerely,

Edward D. Young III (By PEK)

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[7] *In the Matter of Provision of Access for 800 Service*, 6 FCC Rcd 5421 (1991) and 4 FCC Rcd 2824 (1989).